Heal the Bay

1444 9th Street
Santa Monica CA 90401

ph 310 451 1550
fax 310 496 1902

info@healthebay.org
www.healthebay.org

March 7, 2007

Executive Officer and Members of the Board
California Regional Water Quality Control Board, Los Angeles Region
320 W. 4th St., Suite 200
Los Angeles, CA 90013

**Re: Draft Ventura County Municipal Separate Storm Sewer System Permit (NPDES Permit No. CAS004002)**

Dear Mr. Bishop and Members of the Board:

On behalf of Heal the Bay, we submit the following additions to our extensive joint comment letter with NRDC dated March 6, 2007. Specifically, the additional comments are in regards to the receiving water monitoring, receiving water standards, and TMDL sections of the Draft Ventura County Municipal Separate Storm Sewer System Permit ("Draft Permit" or "Permit"). We appreciate your consideration of these comments.

## I. Monitoring/ Compliance-Assurance

### A. The Draft Permit's monitoring program must be adequate to determine compliance with the Permit's requirements.

As discussed in our March 6, 2007 comment letter, the Clean Water Act requires that a permittee undertake a self-monitoring program sufficient to determine compliance with its NPDES permit. (See 40 C.F.R. § 122.44(i)(1)). A goal specified for monitoring requirements in the Draft Permit is to assess "…compliance with effluent limitations and water quality objectives." Permit at F-1. However as written, the Permit does not require sufficient monitoring to determine whether a specific municipality is in fact causing or contributing to violations of water quality standards.

Specifically, the monitoring program requires several monitoring events per year at a total of 5 mass emissions stations on the main stems and 2 or 3 tributary monitoring stations. Permit at F-2. Further, the Regional Board proposes to reduce the number of mass emissions stations to 3 stations for the majority of the permit cycle. This is an extremely small number of monitoring locations given that Ventura County covers an area of 1,873 square miles and multiple permittees preside over each of the three main watershed management areas ("WMA"). How will the Regional Board distinguish among permittees that are in compliance and those that are not with so few monitoring stations?

Further, the monitoring program relies on a rotating monitoring system for its tributary monitoring and bioassessment monitoring. Specifically, designated tributaries in a specific WMA are monitored for two years and then another WMA is monitored. A similar approach is taken for bioassessment monitoring. In this case, a WMA is monitored for one year and then the

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next year a new watershed is monitored. In the "off" years, how will compliance assurance in these watersheds be determined? As we know, there is significant variability in water quality and in the Index of biological Integrity from year to year and from location to location. In a sense, this approach gives the permittees a "free pass" to discharge pollutants and impair macroinvertebrate communities during certain years.

As outlined above, compliance assurance is impossible under the current monitoring scheme. Thus, we recommend that the Regional Board create a more robust monitoring program.[1] First, there should be an increased number of required monitoring locations. At a minimum, the permittees should monitor 10% of all outlets that are 36 inches or greater in diameter in each WMA. Also, additional monitoring sites should be selected that represent each individual permittee's discharge, so that any water quality standard exceedence can be linked to a MS4. In addition, each monitoring location should have monitoring required each year; the proposed rotating system should be removed from the Permit.

**B. The detailed nature of the Draft Permit may hinder compliance-assurance.**

In general, the Permit is extremely thorough and gives the permittees very detailed requirements. For instance under the Public Information and Participation Program, the Permittees are required to perform many subtasks such as developing a strategy to educate ethnic communities and distributing education materials to pet shops. While these are potentially important tasks, how will the Regional Board determine if these actions were completed satisfactorily? This is an example of one of numerous compliance-assurance issues that will be extremely difficult for the Regional Board to address with their current compliance report review program.

**C. Miscellaneous Monitoring Comments:**

- The toxicity monitoring program requirements are very arbitrary and will not provide a proper determination if stormwater discharges are impacting aquatic life. For instance, TIEs are only conducted if 90% or more toxicity is found in the first year. Also a TRE is not triggered if less than 50% of the toxic response is linked to a specific pollutant category in at least two samples or if two TREs have already been done that year. Permit at F-5 and F-6. These triggers are arbitrary and unsubstantiated, and will not provide adequate information for aquatic species impacts. Thus, the monitoring should be modified to have a more protective toxicity threshold and to require TIEs and TREs when there are significant toxicity problems in receiving waters. These requirements should be modeled from the standard language in POTW NPDES permits. Also, each TRE action should include an implementation plan with milestones for constructing specific BMPs that target the pollutant of concern.

- The aquatic toxicity monitoring requirements specify both the freshwater and marine species to be used in the toxicity testing. As the Regional Board has acknowledged in other NPDES permit programs, a species screening for the most sensitive species is a

[1] Of note, throughout the State Board's Blue Ribbon Panel Report on the feasibility of numerics in stormwater permits, the experts note the inadequacy of current stormwater monitoring efforts.

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more protective approach. Thus, the Draft Permit should require an initial species screening of three taxa of both freshwater and marine species. Specially, the freshwater species screening should include a fish. One appropriate choice would be the rainbow trout, as this species is similar to steelhead trout. Over the past year, the steelhead trout population in Malibu Creek has mysteriously disappeared over a few months span. Thus, it would be useful to assess the sensitivity of a similar species. Also, sea urchins should be included in the marine species screening.

- Bioassessment monitoring is included in the monitoring program as a special study. Instead, bioassessment monitoring should be included as "Core Monitoring." Bioassessment monitoring is critical to assess the full impacts of the discharge and should be performed on a regular basis. In addition, bioassessment requirements have been a part of NPDES monitoring programs for ocean dischargers including POTWs, refineries and power plants for years, so requiring bioassessment as part of core monitoring requirements would not be precedent setting.

- As written, the tributary monitoring events are only conducted in wet weather. The Regional Board should also include a dry weather sampling event, as water quality may vary drastically between the seasons and this information may prove valuable. For example irrigation runoff from residential and agricultural sites may contain high concentrations of nutrients, fecal bacteria, herbicides, fungicides or pesticides.

- Appendix B outlines pollutants of concern that have been identified in past Water Quality Monitoring Reports. In other words, there have been known exceedences of these pollutants. However, there does not appear to be specific implementation actions required in the Permit to target these pollutants. The Regional Board should require pollutant of concern-targeted implementation plans that outline specific BMPs designed to ensure compliance with water quality standards, as required in the Permit.

## II. TMDLs

### A. The Draft Permit must include numeric effluent limits based on WLAs for all TMDLs in effect in Ventura County.

Federal law clearly commands that the Regional Board integrate adopted TMDLs into the effluent limitations of appropriate NPDES permits. Specifically, Federal regulations require that:

> Effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7. (40 CFR § 122.44(d)(4)(vii)(B).)

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Thus, the effluent limits set by the Draft Permit must be consistent with the wasteload allocations for those TMDLs in effect for Ventura County. Appropriately, the Ventura MS4 Permit outlines WLAs for four TMDLs: Santa Clara River Nutrient TMDL, Malibu Creek Bacteria TMDL, Calleguas Creek Toxicity TMDL and Calleguas Creek OC Pesticides TMDL. However, the Permit fails to include WLAs for five additional TMDLs in effect in Ventura County: Calleguas Creek Nitrogen TMDL, Calleguas Creek Chloride TMDL, Santa Clara River Chloride TMDL, Malibu Creek Nutrients TMDL, and Calleguas Creek Metals and Selenium TMDL[2]. Thus, the Regional Board must modify the Draft Permit to include these numeric WLAs.

**B. The Draft Permit must include <u>all</u> required actions outlined in TMDL implementation schedules.**

As you know, implementation schedules included in TMDL Basin Plan Amendments adopted by the Regional Board require the discharger to complete various actions before the final compliance deadline. For instance, schedules may require monitoring plan submittals or the demonstration of a waste load reduction after a certain period of time. These actions are important steps in ensuring that dischargers are on-track for ultimate compliance with the waste load allocations. The implementation schedule actions that have completion dates within the term of the Ventura Permit should also be included in the Permit, as they must be enforceable requirements. A summary of the actions that should be specified in the Permit are outlined below:

**Calleguas Creek Nitrogen Compounds and Related Effects**

- July 2008: Complete Special Studies for algae impairments of Calleguas Creek, its tributaries and Mugu Lagoon.
- July 2010: Final achievement of ammonia and oxidized nitrogen standards.

**Calleguas Organochlorine Pesticides, Polychlorinated Biphenyls, and Siltation**

- March 2007: Submit a workplan for approval by the EO to identify urban, industrial and domestic sources of OC pesticides and PCBs and control methods and to implement a collection and disposal program for organochlorine pesticides and polychlorinated biphenyls.
- March 2007: Special Study #1 – Submit a workplan
- March 2007: Special Study #2 – Conduct a study to identify land areas with high OC and PCB concentrations, and submit a workplan including milestones and an implementation period that is as short as possible, but not to exceed 6 years, for removal to mitigate the effects of flood control practices…
- March 2010: Based on the results of the Task 5 workplan approved by EO, implement a collection and disposal program for OC pesticides and PCBs.

**Calleguas Toxicity, Chlorpyrifos, and Diazinon**

[2] Of note, the Calleguas Creek Metals and Selenium TMDL was adopted by the Regional Board on October 25, 2006 and has not been approved by OAL. However, the Consent Decree deadline is March 24, 2007, so it is likely that this TMDL will be in effect before this Permit is brought before the Regional Board.

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- March 2008: Special Study #1 – Investigate the pesticides that will replace diazinon and chlorpyrifos in the urban environment, their potential impact on receiving waters, and potential control measures.
- TBD: Special Study #2 – Consider results of monitoring of sediment concentrations by source/land use type thorough special study required in the OC Pesticide, PCB and siltation TMDL Implementation Plan.
- March 2009: Develop and implement collection program for diazinon and chlorpyrifos and an education program. Collection and education could occur thorough existing programs such as household hazardous waste collection events.
- TBD: Special Study #3 – Calculation of sediment transport rates in CCW. Consider findings of transport rates developed through the OC Pesticide, PCB and siltation TDML Implementation Plan.
- March 2008: Achievement of Final WLAs.

**Santa Clara River - Nitrogen Compounds**

- Current: Apply WLAs to MS4 permittees
- Annually: Annual progress reports on the Implementation Plan shall be provided to the Regional Board by the responsible parties or their representatives.

**Calleguas Creek Metals and Selenium TMDL**

- Effective Date of amendment: Interim WLAs
- 3 months after effective date: Submit Calleguas Creek Watershed Metals and Selenium Monitoring Program.
- 3 months after EO approval: Implement Monitoring Program.
- 1 year after submittal of first annual monitoring report: Re-calibrate HSPF water quality model based on first year monitoring data.
- 2 years after effective data: Conduct a source control study, develop and submit an Urban Water Quality Management Program for copper, mercury, nickel, and selenium.
- 1 year after approval of UWQMP: Implement UWQMP.
- Within 6 months of completion of study: Evaluate results of the OCs TMDL Special Study- Calculation of sediment transport rates.
- Within 2 years after the effective date of the amendment: Include monitoring for copper, mercury, nickel, and selenium in the OC pesticides TMDL, Special Study-Monitoring of sediment by source and land use type.
- Within 6 months of completion of the study: Evaluate the results of the OC Pesticides TMDL, Special Study – Effects of BMPs on Sediment and Siltation.
- Within 1 year after the effective date of the amendment: Submit workplan for Special Study #2 – Identification of selenium contaminated groundwater sources.
- Within 1 year of approval of workplan by EO: Submit results of Special Study #2.
- Within 1 year after the effective date of the amendment: Submit work plan for Special Study #3 – Investigation of Metals' "Hot Spot" and Natural Soil.

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- Within 2 years of approval of workplan by EO: Submit results of Special Study #3.
- 6 years after the effective date: Evaluate effectiveness of BMPs
- Within 1 year after the completion of the studies: Evaluate the results of implementation actions for Special Studies #2 and #3.

## III. Municipal Action Levels and Receiving Water Limitations

### A. The Regional Board should include MALs for additional stormwater pollutants of concern.

As stated in the previous March 6th letter, municipal action levels ("MALs") are useful as interpretations of the MEP standard but referencing them in the receiving waters section of the Permit impermissibly "mixes apples and oranges." In addition, we are concerned that the MALs are extremely limited in that they only include TSS, COD, total coliforms, E. coli, Cd, Cr, Cu, Pb, Ni and Zn. Clearly this list of contaminants is extremely limited and does not include mercury, or any organics including OP or halogenated pesticides or PAHs: all major concerns in stormwater. Why weren't MALs included for these critical constituents? MALs should be added for these constituents in order to better protect aquatic life and public health.

The inclusion of MALs in the receiving water limitations section is both confusing and inappropriate as stated in the previous letter. Also, the section does not provide clear enforceable deadlines for reporting exceedences of receiving water limits ("RWLs"), submission of an implementation plan to meet RWLs with milestones and dates, and an enforceable RWL compliance deadline. Please clarify the language in the section to make it clear that the BMP implementation process is not complete until RWLs are continually met. Part 2-5 is inconsistent with the requirements to meet RWLs as the section appears to delegate discretion to the Regional Board on requirements for municipalities to continue adding additional BMPs if the city can demonstrate that they are meeting MALs in some unspecified manner.

### B. The Permit should include BMP Performance Criteria.

One of the most significant shortcomings in previous stormwater permits and municipal stormwater management programs is the lack of performance based criteria for BMPs. We have yet to see a program that requires BMPs to include performance based design criteria. As a result, BMPs are added as part of SUSMP requirements or for pollution abatement without any focus on the water quality exiting the BMPs. Even the SUSMP requirements from the previous permit had a design criteria for flow (capture, treat or infiltrate the 85th percentile storm), with no performance based design criteria. The Draft Permit includes numeric design criteria for hydrologic control with no inclusion of water quality based performance criteria.

Discharges from the MS4 must not cause or contribute to exceedences of RWLs. One of the most effective ways to ensure stormwater program success and RWL attainment is to require performance based criteria for all BMPs that are constructed in response to RWL exceedences. Also, all BMPs that are constructed as part of new and redevelopment in the county must be required to meet water quality based performance criteria. Flow based design criteria are simply not enough to ensure that RWLs are consistently met.

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Since the Regional Board has gone to considerable effort to include MALs to ensure compliance with the MEP provisions in the Permit, we strongly suggest applying the MALs as a water quality based performance design criteria for BMPs in new and redevelopment, and those constructed in response to exceeding RWLs. As you know, MALs were not developed as water quality based design criteria, but they were based using a statistical population approach based on monitoring data for pollutants in stormwater. As such, requiring MALs as a BMP performance design criteria is feasible based on stormwater monitoring results.

Another approach that would take more time to complete would be to develop water quality performance design criteria based on analysis of the ASCE/EPA stormwater BMP database. The database includes extensive BMP performance data that could be used for development of performance based criteria. Such a project would take the Regional Board about a year to complete, but language could be added to the Permit stating that the Regional Board will develop these criteria for inclusion in the Ventura County Permit by July, 2008. Regardless of approach the Regional Board takes, it is critical to include scientifically supported performance based design criteria in the Permit in order to move the county more quickly towards receiving water quality standards attainment.

We thank the Board Members and Board Staff for this opportunity to comment on the Draft Permit. If you have any questions, feel free to contact us.

Sincerely,

Mark Gold, D. Env.
Executive Director

Kirsten James, MESM
Staff Scientist